

Figure 1A.

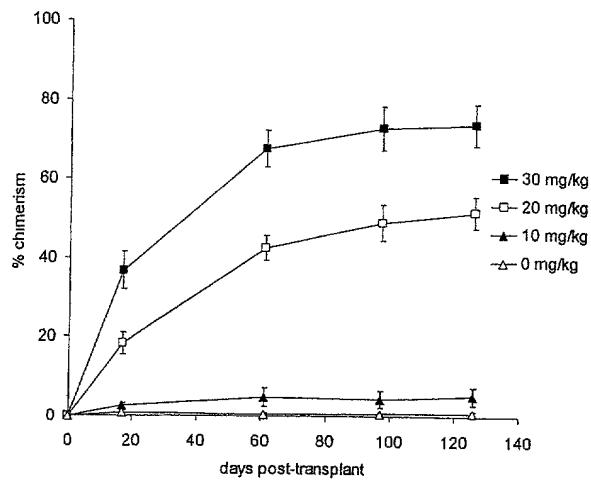


Figure 1B.

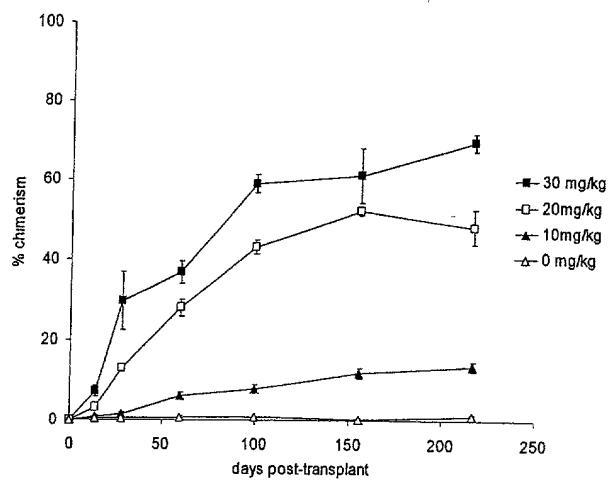


Figure 1C.

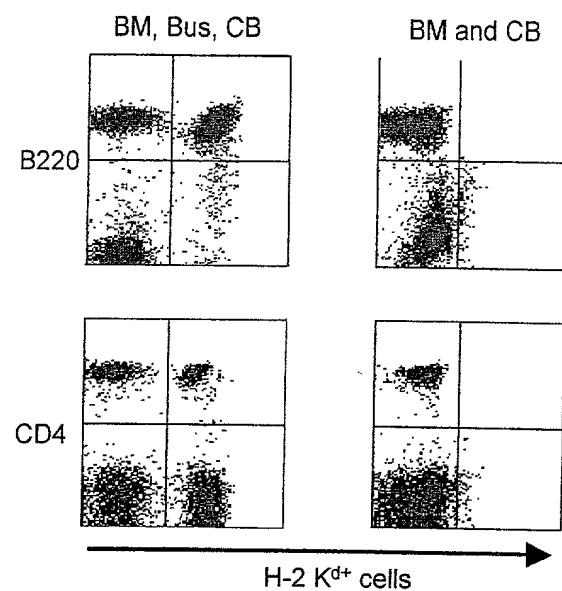


Figure 1D.

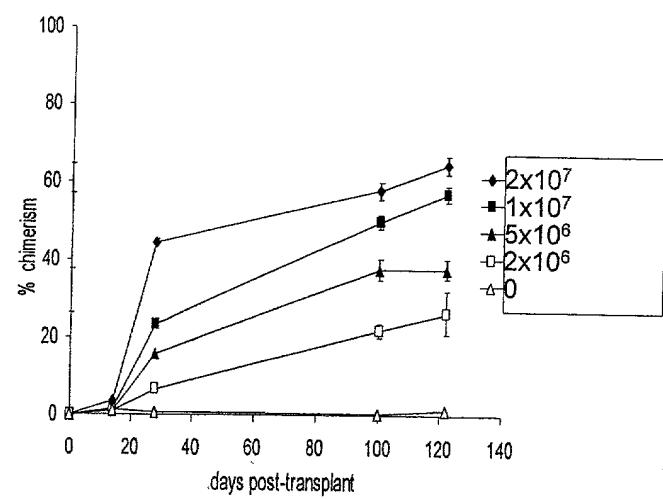


Figure 2

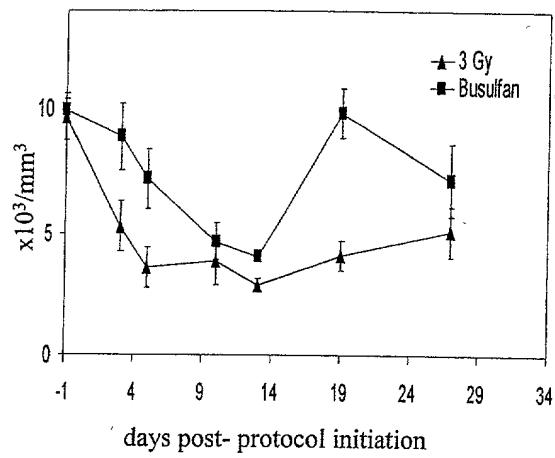


Figure 3A.

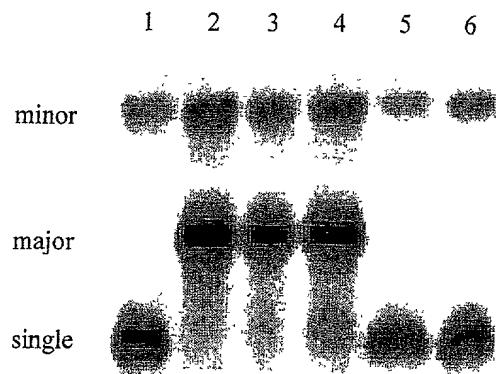


Figure 3B.

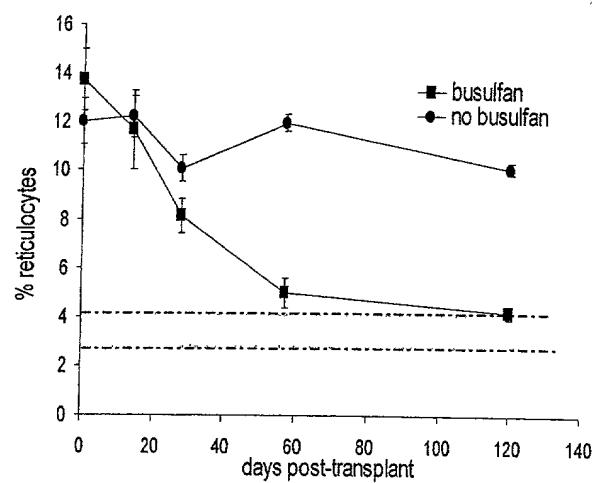


Figure 4A.

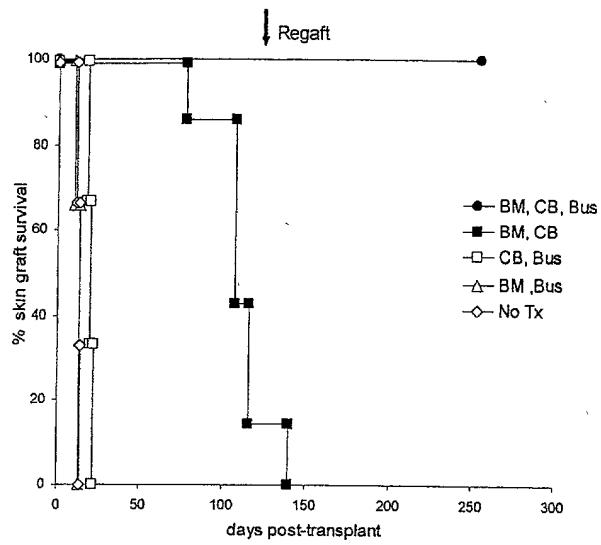


Figure 4B.

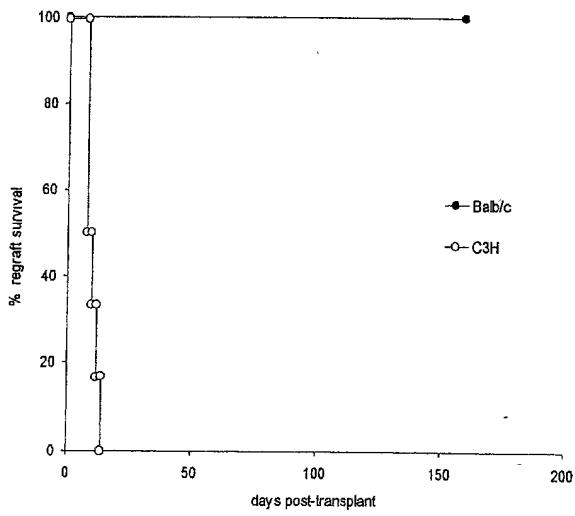


Figure 5A.

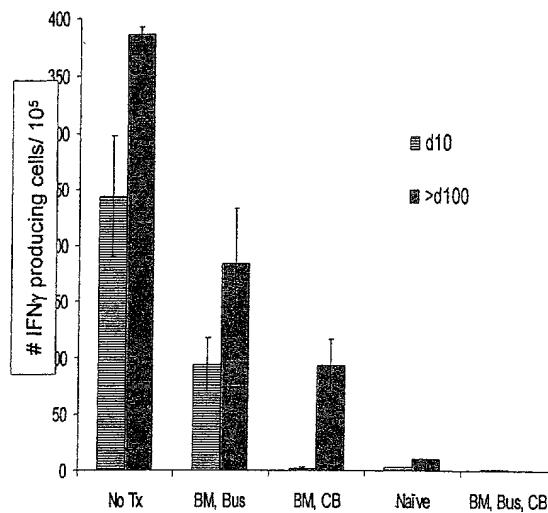


Figure 5B.

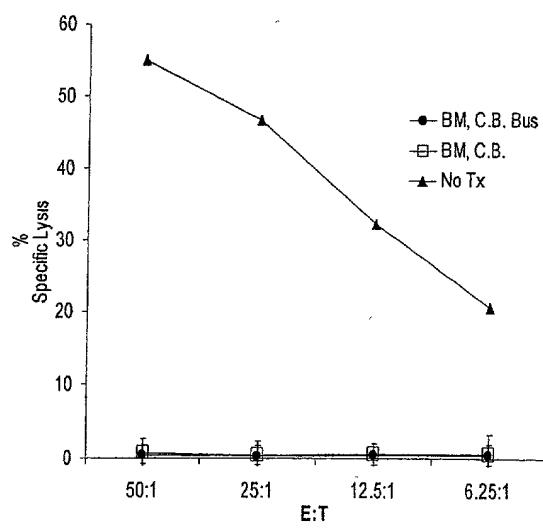


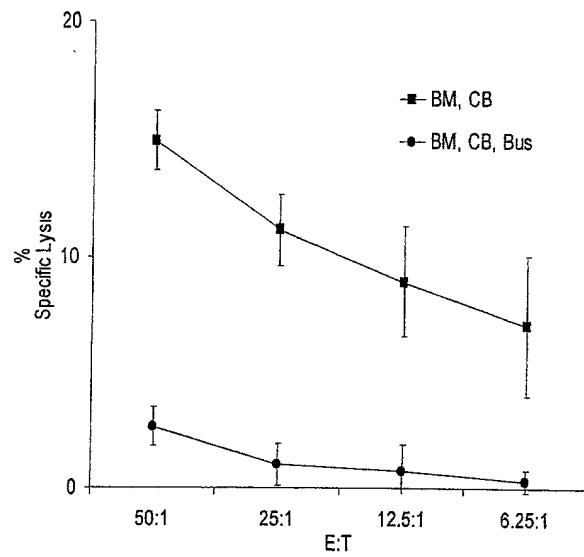
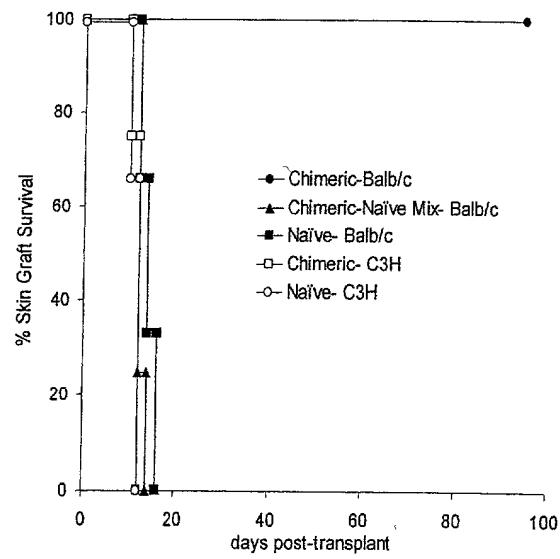
Figure 5C.**Figure 5D.**

Figure 6A.

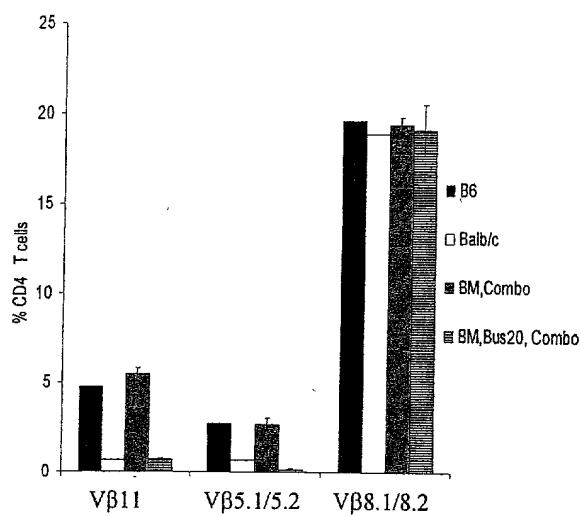


Figure 6B.

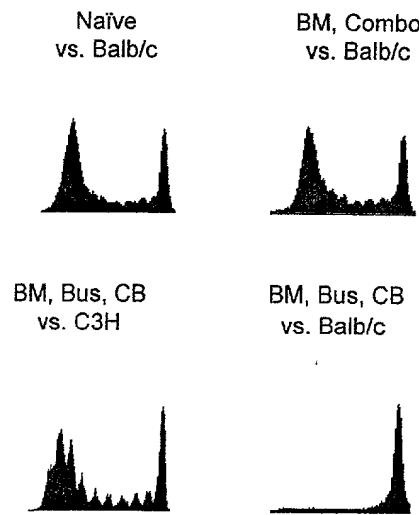


Figure 7a

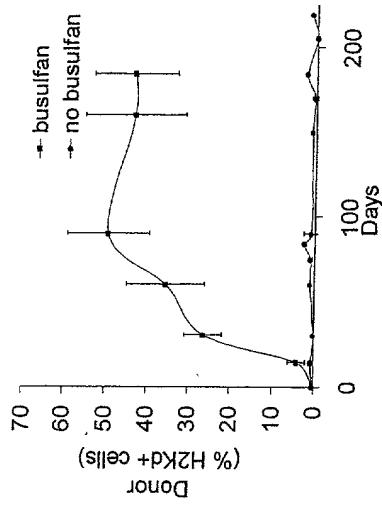


Figure 7b

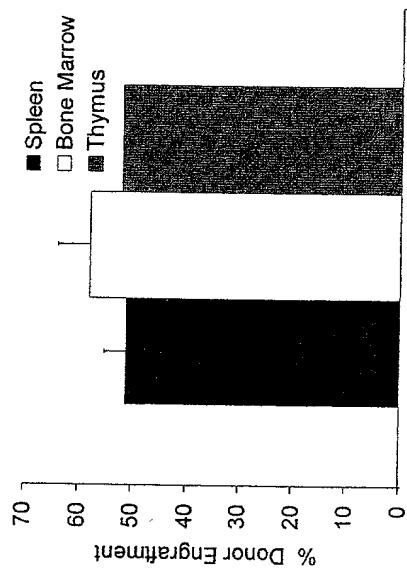


Figure 8

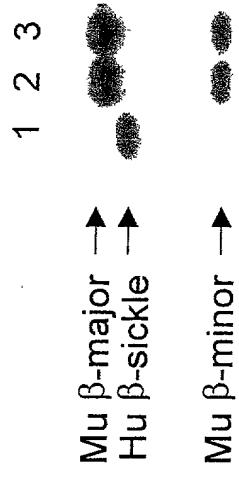


Figure 9

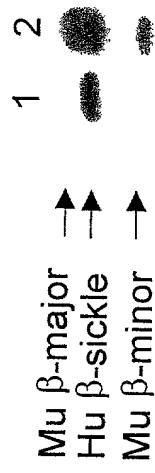


Figure 10a

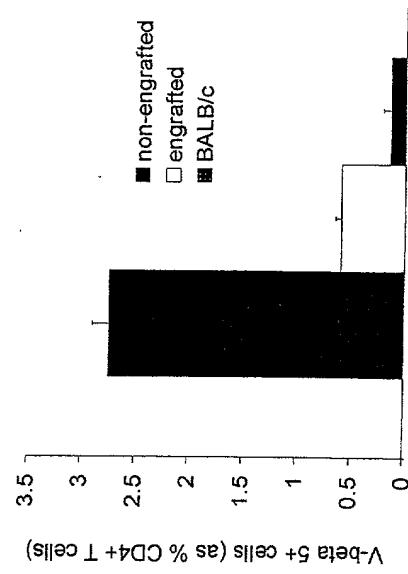


Figure 10b

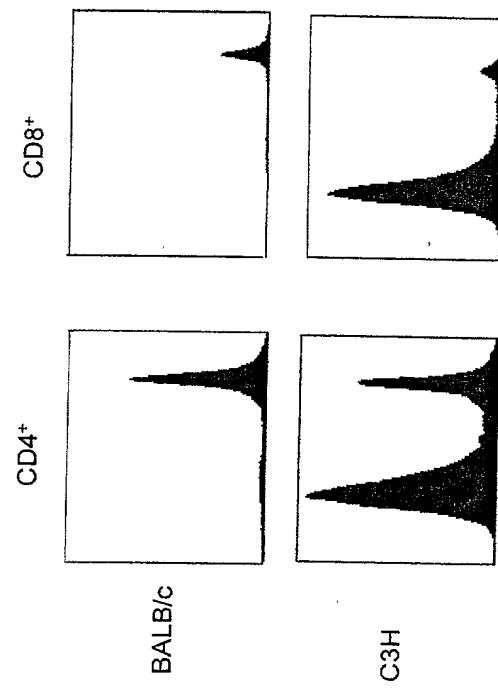


Figure 11

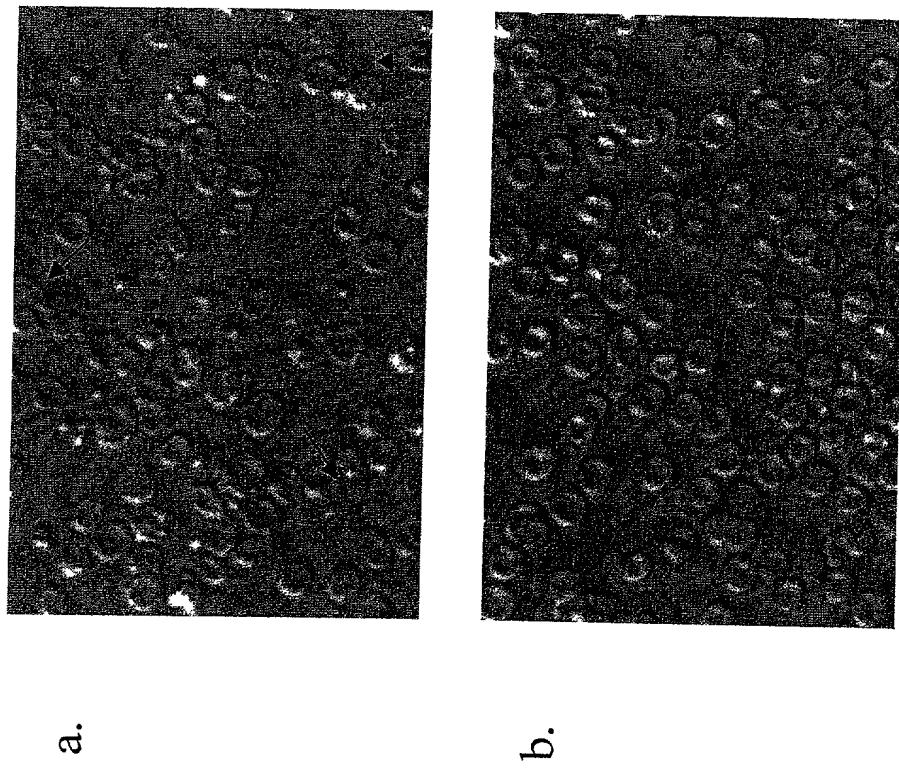


Figure 11c

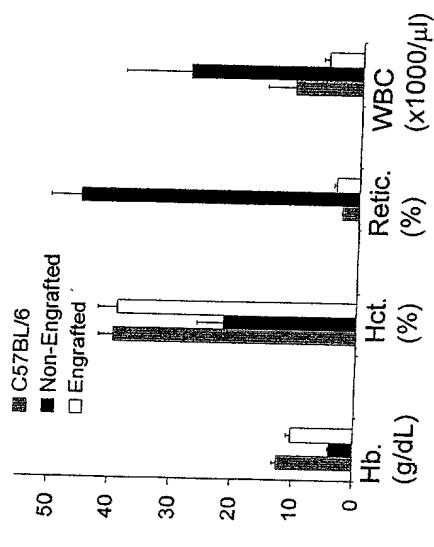


Figure 11d

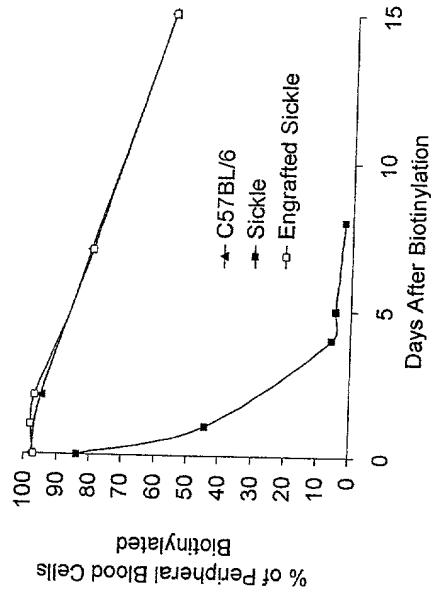


Figure 11e

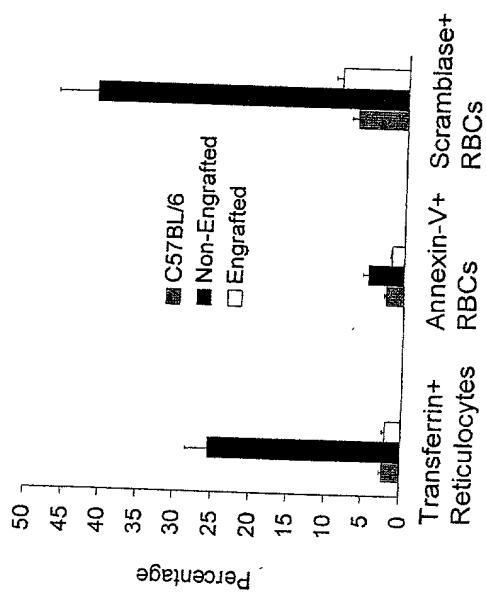


Figure 12a

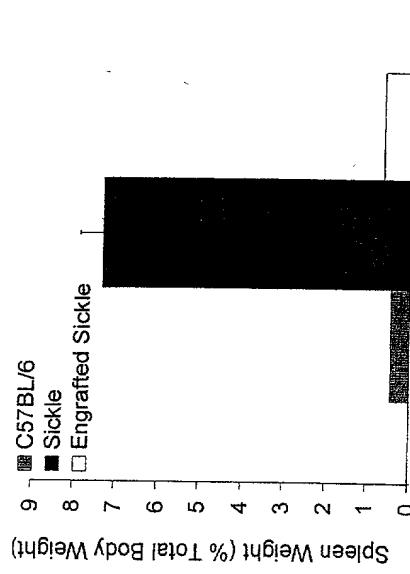


Figure 12b

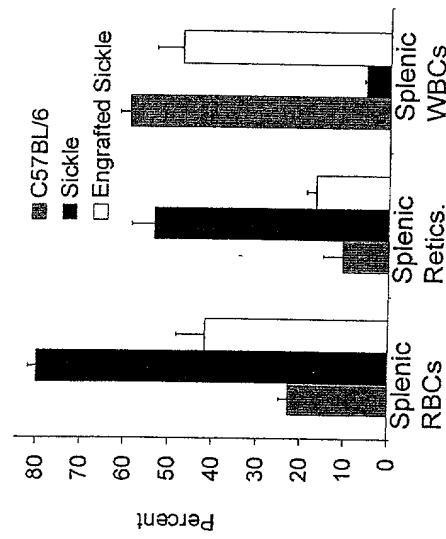
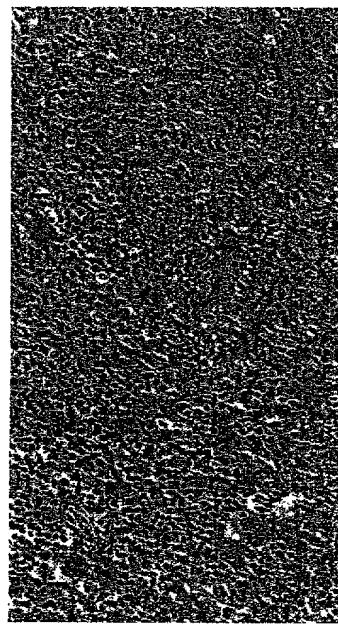


Figure 12

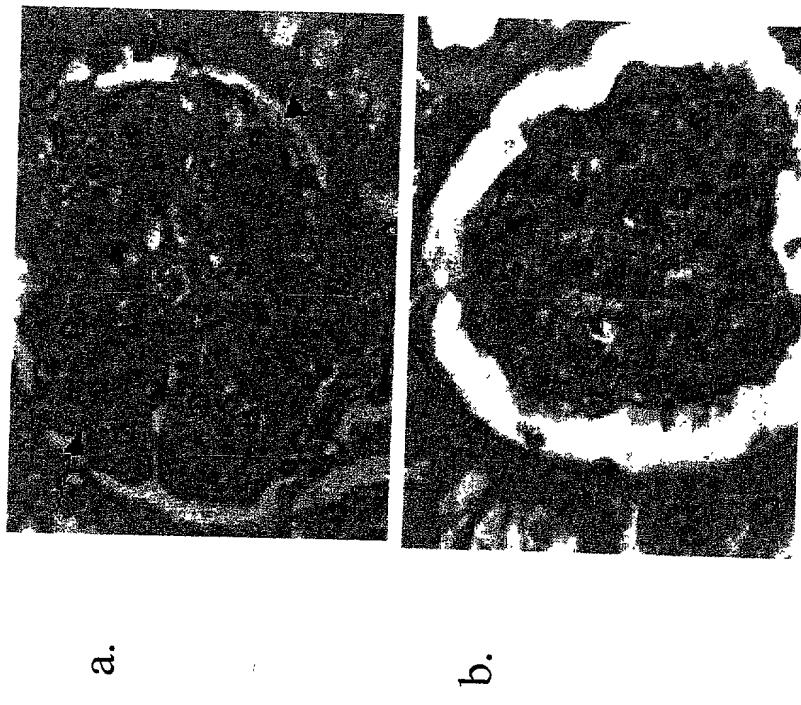


c.



d.

Figure 13



ATGGGTGACTGCTCACACAGAGGACGCTGCTCAGTCTGGCCTTGCACCTCTGTTCCA M~~G~~V~~L~~L~~T~~Q~~R~~T~~L~~L~~S~~L~~V~~L~~A~~L~~L~~F~~P~~	-19 -7
AGCATGGCGAGCATGGCAATGCACGTGGCCAGCCTGCTGTGGTACTGGCCAGCAGCCGA S~~M~~A~~S~~M~~A~~M~~H~~V~~A~~Q~~P~~A~~V~~V~~L~~A~~S~~S~~R~~ +1	+42 +14
GGCATCGCTAGCTTGTGTGAGTATGCATCTCAGGCAAAGCCACTGAGGTCCGGGTG G~~I~~A~~S~~F~~V~~C~~E~~Y~~A~~S~~P~~G~~K~~A~~T~~E~~V~~R~~V~~	+102 +34
ACAGTGCTTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGGCAACCTACATGATG T~~V~~L~~R~~Q~~A~~D~~S~~Q~~V~~T~~E~~V~~C~~A~~A~~T~~Y~~M~~M~~	+162 +54
GGGAATGAGTTGACCTTCCTAGATGATTCCATCTGCACGGCACCTCCAGTGGAAATCAA G~~N~~E~~T~~F~~L~~D~~S~~I~~C~~T~~G~~T~~S~~S~~G~~N~~Q~~	+222 +74
GTGAACCTCACTATCCAAGGACTGAGGGCCATGGACACGGGACTCTACATCTGCAAGGTG V~~N~~L~~T~~I~~Q~~G~~L~~R~~A~~M~~D~~T~~G~~L~~Y~~I~~C~~K~~V~~	+282 +94
GAGCTCATGTACCCACCGCCATACTACGAGGGCATAGGCAACGGAACCCAGATTATGTA E~~L~~M~~Y~~P~~P~~Y~~E~~G~~I~~G~~N~~G~~T~~Q~~I~~Y~~V~~	+342 +114
ATTGATCCAGAACCGTGCCCAGATTCTGATCAGGAGCCAAATCTTCTGACAAAACCTCAC I~~D~~P~~E~~P~~C~~P~~D~~S~~D~~Q~~E~~P~~K~~S~~S~~D~~K~~T~~H~~	+402 +134
ACATCCCCACCGTCCCCAGCACCTGAECTCCTGGGGGGATCGTCAGTCTTCCTCTTCCC T~~S~~P~~P~~S~~A~~P~~E~~L~~G~~G~~S~~S~~V~~L~~F~~P~~	+462 +154
CCAAAACCCAAGGACACCCCTCATGATCTCCGGACCCCTGAGGTACATGCGTGGTGGTG P~~K~~P~~K~~D~~T~~L~~M~~I~~S~~R~~T~~P~~E~~V~~T~~C~~V~~V~~	+522 +174
GACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAGGTG D~~V~~S~~H~~E~~D~~P~~E~~V~~K~~F~~N~~W~~Y~~V~~D~~G~~V~~E~~V~~	+582 +194
CATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAGC H~~N~~A~~K~~T~~K~~P~~R~~E~~E~~Q~~Y~~N~~S~~T~~Y~~R~~V~~V~~S~~	+642 +214
GTCCTCACCGTCCCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAGGTCTCC V~~L~~T~~V~~L~~H~~Q~~D~~W~~L~~N~~G~~K~~E~~Y~~K~~C~~K~~V~~S~~	+702 +234
AACAAAGCCCTCCCAGCCCCATCGAGAAAACCCTCTCAAAGCCAAAGGGCAGCCCCGA N~~K~~A~~L~~P~~A~~P~~I~~E~~K~~T~~I~~S~~K~~A~~K~~G~~Q~~P~~R~~	+762 +254
GAACCACAGGTGTACACCCCTGCCCGGATGAGCTGACCAAGAACCCAGGTCAAGC E~~P~~Q~~V~~Y~~T~~L~~P~~P~~S~~R~~D~~E~~L~~T~~K~~N~~Q~~V~~S~~	+822 +274
CTGACCTGCCCTGGTCAAAGGCTTCTATCCCAGCGACATGCCGTGGAGTGGAGAGCAAT L~~T~~C~~L~~V~~K~~F~~Y~~P~~S~~D~~I~~A~~V~~E~~W~~E~~S~~N~~	+882 +294
GGGCAGCCGGAGAACAACTACAAGACCACGCCCTCCCGTGCTGGACTCCGACGGCTCCTTC G~~Q~~P~~E~~N~~N~~Y~~K~~T~~P~~V~~L~~D~~S~~D~~G~~S~~F~~	+942 +314
TTCCCTCTACAGCAAGCTACCGTGGACAAGAGCAGGTGGCAGCAGGGAACGTCTTCTCA F~~L~~Y~~S~~K~~L~~T~~V~~D~~K~~S~~R~~W~~Q~~G~~N~~V~~F~~S~~	+1002 +334
TGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCGTCT C~~S~~V~~M~~H~~E~~A~~L~~H~~N~~Y~~T~~Q~~K~~S~~L~~S~~S~~	+1062 +354

CCGGGTAAATGA
P~~G~~K~~*

ATGGGTGTA	CTGCTCACACAGAGGACGCTGCTCAGTC	GGTCCTGC	ACTCCTGTTCCA	-19
M~~G~~V~~L~~L~~T~~Q~~R~~T~~L~~S~~L~~V~~L~~A~~L~~F~~P~~				-7
AGCATGGCGAGC	ATGGCAATGCACGTGGCC	CAGCCTGCTG	GGTACTGGCCAGCAGCGA	+42
S~~M~~A~~S~~M~~A~~M~~H~~V~~A~~Q~~P~~A~~V~~V~~L~~A~~S~~S~~R~~				+14
	+1			
GGCATCGCTAG	CTTGTGTGAGTATGCATCTCCAGG	CAAATATACTGAGGTCCGGGTG	+102	
G~~I~~A~~S~~F~~V~~C~~E~~Y~~A~~S~~P~~G~~K~~Y~~T~~E~~V~~R~~V~~			+34	
ACAGTGCTTCGG	CAGGCTGACAGCCAGGTGACTGAAGTCTG	TGCGGCACCTACATGATG	+162	
T~~V~~L~~R~~Q~~A~~D~~S~~Q~~V~~T~~E~~V~~C~~A~~T~~Y~~M~~M~~			+54	
GGGAATGAGTTGAC	CTTCCTAGATGATTCCATCTGCACGGC	ACCTCCAGTGGAAATCAA	+222	
G~~N~~E~~L~~T~~F~~L~~D~~D~~S~~I~~C~~T~~G~~T~~S~~S~~G~~N~~Q~~			+74	
GTGAACCTCA	CTATCCAAGGACTGAGGCCATGGACACGG	GGACTCTACATCTGCAAGGTG	+282	
V~~N~~L~~T~~I~~Q~~G~~L~~R~~A~~M~~D~~T~~G~~L~~Y~~I~~C~~K~~V~~			+94	
GAGCTCATGTACCC	ACCGCCATACTACGAGGGCATAGGCA	ACGGAACCCAGATTATGTA	+342	
E~~L~~M~~Y~~P~~P~~Y~~E~~G~~I~~G~~N~~G~~T~~Q~~I~~Y~~V~~			+114	
ATTGATCCAGAAC	CGTGCCCAGATTCTGATCAGGAGCC	AAATCTTCTGACAAACTCAC	+402	
I~~D~~P~~E~~P~~C~~P~~D~~S~~D~~Q~~E~~P~~K~~S~~S~~D~~K~~T~~H~~			+134	
ACATCCCCACCGT	CCCCAGCACC	TGAACCTCCTGGGGGATCGTCAGTCTTCTCTTCCC	+462	
T~~S~~P~~S~~P~~A~~P~~E~~L~~G~~S~~S~~V~~L~~F~~P~~			+154	
CCAAAACCCAAGG	ACACCCCTCATGATCTCCGGACCC	CTGAGGTACATGCGTGGTGG	+522	
P~~K~~P~~K~~D~~T~~L~~M~~I~~S~~R~~T~~P~~E~~V~~T~~C~~V~~V~~V~~			+174	
GACGTGAGCCACG	AAAGACCC	TGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAGGTG	+582	
D~~V~~S~~H~~E~~D~~P~~E~~V~~K~~F~~N~~W~~Y~~V~~D~~G~~V~~E~~V~~			+194	
CATAATGCCAAGAC	AAAGCCGGAGGAGCAGTACAACAGCAC	GTACCGTGTGGTCAGC	+642	
H~~N~~A~~K~~T~~K~~P~~R~~E~~E~~Q~~Y~~N~~S~~T~~Y~~R~~V~~V~~S~~			+214	
GTCCTCACCGT	CCTGCACCAGGACTGGCTGAATGG	CAAGGAGTACAAGTGCAAGGTCTCC	+702	
V~~L~~T~~V~~L~~H~~Q~~D~~W~~L~~N~~G~~K~~E~~Y~~K~~C~~K~~V~~S~~			+234	
AACAAAGCC	CTCCCAGCCCCATCGAGAAAACC	ATCTCCAAAGCCAAAGGGCAGCCCCGA	+762	
N~~K~~A~~L~~P~~I~~E~~K~~T~~I~~S~~K~~A~~K~~G~~Q~~P~~R~~			+254	
GAACCACAGGTG	TACACCC	TGCCCATCCGGATGAGCTGACCAAGAAC	+822	
E~~P~~Q~~V~~Y~~T~~L~~P~~S~~R~~D~~E~~T~~K~~N~~Q~~V~~S~~			+274	
CTGACCTGCC	TGGCAAAGGCTTCTATCCCAGCGACATCGCC	GTGGAGAGCAAT	+882	
L~~T~~C~~L~~V~~K~~G~~F~~Y~~P~~S~~D~~I~~A~~V~~W~~E~~S~~N~~			+294	
GGGCAGCCGGAGA	ACAAC	ACAAGACCACGCC	+942	
G~~Q~~P~~E~~N~~N~~Y~~K~~T~~T~~P~~V~~L~~D~~S~~D~~G~~S~~F~~			+314	
TTCCTCTACAGCA	AGCTCACCGTGGACAAGAGCAGGTGGC	CAGCAGGGAACGTCTTCTCA	+1002	
F~~L~~Y~~S~~K~~L~~T~~V~~D~~K~~S~~R~~W~~Q~~G~~N~~V~~F~~S~~			+334	
TGCTCCGTATGC	ATGAGGCTCTGCACACC	ACTACACGCAAGAGGC	+1062	
C~~S~~V~~M~~H~~E~~L~~H~~N~~Y~~T~~Q~~K~~S~~L~~S~~			+354	

CGGGTAAATGA
P~~G~~K~~*

ATGGGTGTACTGCTCACACAGAGGACGCTGCTCAGTCTGGCTTGCACCTCTGTTCCA
 M~G~V~L~L~T~Q~R~T~L~L~S~L~V~L~A~L~L~F~P~

 AGCATGGCAGGATGGCAATGCACGTGGCCCAAGCCTGCTGTGGTACTGGCCAGGCCGA
 S~M~A~S~M~A~M~H~V~A~Q~P~A~V~V~L~A~S~S~R~
 +
 GGCATCGCTAGCTTGTGTGAGTATGCATCTCCAGGCAAATTGACTGAGGTCCGGGTG
 G~I~A~S~F~V~C~E~Y~A~S~P~G~K~L~T~E~V~R~V~

 ACAGTGCTTCGGCAGGCTGACAGCCAGGTGACTGAAGTCGTGGCCAAACCTACATGATG
 T~V~L~R~Q~A~D~S~Q~V~T~E~V~C~A~A~T~Y~M~M~

 GGGATQAGATTGACCTTCCTAGATGATTCACATGCACGGCACCTCAGTGGAAATCAA
 G~N~E~L~T~F~L~D~D~S~I~C~T~G~T~S~S~G~N~Q~

 GTGAACCTCACTATCCAAGGACTGAGGCCATGGACACGGACTCTACATCTGCAAGGTG
 V~N~L~T~I~Q~G~L~R~A~M~D~T~G~L~Y~I~C~K~V~

 GAGCTCATGTACCCACGCCATACTACGAGGCCATAGGCAACGGAACCCAGATTTATGTA
 E~L~M~Y~P~P~Y~E~G~I~G~N~G~T~Q~I~Y~V~

 ATTGATCCAAGAACCGTGCCAGATCTGATCAGGAGCCAAATCTCTGACAAAACCTCAC
 I~D~P~E~P~C~P~D~S~D~Q~E~P~K~S~S~D~K~T~H~

 ACATCCCCACCGTCCCCAGCACCTGAACCTCTGGGGGATCGTCACTCTTCCCTCTTCCCC
 T~S~P~S~P~A~P~E~L~L~G~S~S~V~F~L~F~P~

 CCAAAACCCAAGGACACCCCTCATGATCTCCCGACCCCTGAGGTACATGCCTGGTGGT
 P~K~P~K~D~T~L~M~I~S~R~T~P~E~V~T~C~V~V~V~

 GACGTGAGGCCACGAAGACCCCTGAGGTCAAGTCAACTGGTACGTGGACGGCGTGGAGGTG
 D~V~S~H~E~D~P~B~V~K~F~N~Y~V~D~G~V~E~V~

 CATAATGCCAAGACAAGCCGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAAGC
 H~N~A~K~T~K~P~R~E~Q~Y~N~S~T~Y~R~V~V~S~

 GTCCTCACCGTCTGCACCCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCC
 V~L~T~V~L~H~Q~D~W~L~N~G~K~E~Y~K~C~K~V~S~

 AACAAAGCCCTCCCAGCCCCATCGAGAAAACATCTCAAAGCCAAAGGGCAGCCCCGA
 N~K~A~L~P~A~P~I~E~K~T~I~S~K~A~K~G~Q~P~R~

 GAACCACAGGTGTACACCCCTGCCCATCCGGGATGAGCTGACCAAGAACCGAGTCAGC
 E~P~Q~V~Y~T~L~P~S~R~D~E~L~T~K~N~Q~V~S~

 CTGACCTGCTGGTCAAAGGCTTCTATCCCAGCGACATGCCGTGGAGTGGAGAGCAAT
 L~T~C~L~V~K~G~F~Y~P~S~D~I~A~V~E~W~E~S~N~

 GGGCAGCCGGAGAACAACTACAAGACCAAGCCTCCCGTGTGGACTCCGACGGCTCTTC
 G~Q~P~E~N~N~Y~K~T~T~P~P~V~L~D~S~D~G~S~F~

 TTCCCTACAGCAAGCTACCGTGGACAAGAGCAGGTGGCAGCAGGGAAACGTCTCTCA
 F~L~Y~S~K~L~T~V~D~K~S~R~W~Q~Q~G~N~V~F~S~

 TGCTCCGTGATGCATGAGGTCTGCACAAGCAACTACACGCAGAGAGCAGGCTCTCCGTCT
 C~S~V~M~H~E~A~L~H~N~H~Y~T~Q~X~S~L~S~L~S~

 CCGGTAAATGA-----
 P~G~K~*-----

FIG. 16

ATGGGTGTACTGCTCACACAGAGGAGCGTGCTCAGTCTGGTCCCTGCACTCCCTGTTCCA
 M~G~V~L~T~Q~R~T~L~S~L~V~L~A~L~F~P~
 AGCATGGCGAGCATGGCAATGCACGTGGCCCAGCCTGCTGTGGTACTGGCCAGCAGCCGA
 S~M~A~S~M~A~M~H~V~A~Q~P~A~V~V~L~A~S~S~R~
 +
 GGCATCGCTAGCTTGTGTGAGTATGCATCTCAGGCAAAACTACTGAGGTCCGGTG
 G~I~A~S~F~V~C~E~Y~A~S~P~G~K~T~T~E~V~R~V~
 ACAGTGCTTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGGCAACCTACATGATG
 T~V~L~R~Q~A~D~S~Q~V~T~E~V~C~A~A~T~Y~M~M~
 GGGATGAGTTGACCTTCCTAGATGATTCATCTGCACGGGCACCTCCAGTGGAAATCAA
 G~N~E~L~T~F~L~D~S~I~C~T~G~T~S~S~G~N~Q~
 GTGAACCTCACTATCCAAGGACTGAGGGCATGGACACGGACTCTACATCTGCAAGGTG
 V~N~L~T~I~Q~G~L~R~A~M~D~T~G~L~Y~I~C~K~V~
 GAGCTCATGTACCCACCGCCATACTACGAGGGCTAGGCAACGGAACCCAGATTTATGTA
 E~L~M~Y~P~P~Y~E~G~I~G~N~G~T~Q~I~Y~V~
 ATTGATCCAGAACCGTGGCCAGATTCTGATCAGGAGCCAACTCTGACAAAACAC
 I~D~P~B~P~C~P~D~S~D~Q~E~P~K~S~S~D~K~T~H~
 ACATCCCCACCGTCCCCAGCACCTGAACTCCTGGGGGATCGTCAGTCTCCTCTTCCC
 T~S~P~P~S~P~A~P~E~L~L~G~S~V~F~L~F~P~
 CCAAAACCAAGGACACCCCTCATGATCTCCGGACCCCTGAGGTACATGCGTGGTGGTG
 P~K~P~K~D~T~L~M~I~S~R~T~P~E~V~T~C~V~V~V~
 GACGTGAGCCACGAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAGGTG
 D~V~S~H~E~D~P~E~V~K~F~N~N~Y~V~D~G~V~E~V~
 CATAATGCCAAGACAAAGCCGCGGGAGGAGCACTACAACAGCACGTACCGTGTGGTCAGC
 H~N~A~K~T~K~P~R~E~B~Q~Y~N~S~T~Y~R~V~V~S~
 GTCTCACCGTCTGCACCGAGACTGGCTGAATGGCAAGGAGTACAAGTGCAGGTCTCC
 V~L~T~V~L~H~Q~D~W~L~N~G~K~E~Y~K~C~V~S~
 AACAAAGCCCTCCCAGCCCCATCGAGAAAACATCTCAAAGCAAAGGGCAGCCCCGA
 N~K~A~L~P~A~P~I~E~K~T~I~S~K~A~K~G~Q~P~R~
 GAACCACAGGTGTACACCTGGGGATGAGCTGACCAAGAACCGAGGTCA
 E~P~Q~V~T~L~P~P~S~R~D~E~L~T~K~N~Q~V~S~
 CTGACCTGCCTGGTCAAAGGCTCTATCCCAGCGACATGCCGTGGAGTGGAGAGCAAT
 L~T~C~L~V~K~G~F~Y~P~S~D~I~A~V~B~W~E~S~N~
 GGGCAGCCGGAGAACAACTACAAGACCAAGCCTCCGTGCTGGACTCCGACGGCTCTC
 G~Q~P~E~N~Y~K~T~T~P~P~V~L~D~S~D~G~S~P~
 TTCTCTACAGCAAGCTACCGTGGACAAGAGCAGGTGGCAGCAGGGAACTCTCC
 F~L~Y~S~K~T~V~D~K~S~R~W~Q~Q~G~N~V~F~S~
 TGCTCCGTGATGCATGAGGCTCTGCACAAACACTACACGGCAGAAGAGCCTCTCC
 C~S~V~M~H~E~A~L~H~N~H~Y~T~Q~K~S~L~S~
 CCGGGTAAATGA
 P~G~K~

FIG. 17

ATGGGTGTACTGCTCACACAGAGGACGGCTGCTCAGTCTGGTCCCTGCACCTCTGTTCCA
 M~G~V~L~L~T~Q~R~T~L~L~S~L~V~L~A~L~F~P~
 AGCATGGCGAGCATGGCAATGCACGTGGCCAGGCTGCTGCTGACTGCCAGCAGCCGA
 S~M~A~S~M~A~M~H~V~A~Q~P~A~V~V~L~A~S~S~R~
 +
 GGCATCGCTAGCTTGTGTGAGTATGCATCTCCAGGCAAATGGACTGAGGTCCGGTG
 G~I~A~S~F~V~C~E~V~A~S~P~G~X~W~T~E~V~R~V~
 ACAGTGCTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGGCAACCTACATGATG
 T~V~L~R~Q~A~D~S~Q~V~T~E~V~C~A~A~T~Y~M~
 GGGAAATGAGTTGACCTCCTAGATGATTCCATCTGCACGGGCACCTCCAGTGGAAATCAA
 G~N~B~L~T~F~L~D~S~I~C~T~G~T~S~S~G~N~Q~
 GTGAACCTCACTATCCAAGGACTGAGGGCCATGGACACGGGACTCTACATCTGCAAGGTG
 V~N~L~T~I~Q~L~R~A~M~D~T~G~L~Y~I~C~K~V~
 GAGCTCATGTACCCACCGCCATACTACGAGGGCATAGGCACACGGAACCCAGATTATGTA
 E~L~N~Y~P~P~Y~E~G~I~G~N~G~T~Q~I~Y~V~
 ATTGATCCAGAACCGTCCCCAGCACCCTGATCAGGAGCCAAATCTCTGACAAAATCAG
 I~D~P~B~P~C~P~D~S~D~Q~B~P~K~S~S~D~K~T~H~
 ACATCCCCACCGTCCCCAGCACCTGAACTCCTGGGGGATCGTCAGTCCTCCCTTCCCC
 T~S~P~P~S~P~A~P~B~L~L~G~S~S~V~P~L~P~P~
 CCAAAACCCAAGGACACCCCTCATGATCTCCGGACCCCTGAGGTACATGGTGGGTGGTG
 P~K~P~K~D~T~L~M~I~S~R~T~P~B~V~T~C~V~V~V~
 GACGTGAGGCCACGAAGACCCCTGAGGTCAAGTCAACTGGTACGTGGACGGCGTGGAGGTG
 D~V~S~H~E~D~P~E~V~K~F~N~W~Y~V~D~G~V~B~V~
 CATAATGCCAAGACAAGCCGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAGC
 H~N~A~K~T~K~P~R~E~E~Q~Y~N~S~T~Y~R~V~V~S~
 GTCCCTCACCGTCCCTGACCCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAGGTCTCC
 V~L~T~V~L~K~Q~D~W~L~N~G~K~E~Y~K~C~K~V~S~
 AACAAAGCCCTCCCAGCCCCATCGAGAAAACATCTCCAAAGCCAAAGGGCAGCCCCGA
 N~K~A~L~P~A~P~I~E~K~T~I~S~K~A~K~G~Q~P~R~
 GAACCACAGGTGTACACCCCTGCCCCCATCCGGGATQAGCTGACCAAGAACCGAGTCAGC
 E~P~Q~V~Y~T~L~P~S~R~D~E~L~T~K~N~Q~V~S~
 CTGACCTGGCTGGTCAAAGGCTCTATCCCAGGACATCQCCGTGGAGTGGAGAGCAAT
 L~T~C~L~V~K~G~F~Y~P~S~D~I~A~V~E~W~E~S~N~
 GGGCAGCCGGAGAACAACTACAAGACCACGCCCTCCGTGGACTCCGACGGCTCCTTC
 G~Q~P~B~N~Y~K~T~T~P~P~V~L~D~S~D~G~S~F~
 TCCCTCTACAGCAAGCTACCGTGGACAAGAGCAGGTGGCAGCAGGGAAACGTCTCTCA
 F~L~Y~S~K~L~T~V~D~X~S~R~W~Q~Q~G~N~V~F~S~
 TGCTCCGTGATGCATGAGGTCTGCACAACCACTACAGCAGAAGAGCCTCTCCCTGTCT
 C~S~V~M~H~E~A~L~H~N~H~Y~T~Q~K~S~L~S~
 CCGGGTAAATGA~
 P~G~X~

FIG. 18

ONCOSTATIN M SIGNAL PEPTIDE

M G V L L T Q R T L L S L V L
 ATG GGT GTA CTG CTC ACA CAG AGG ACG CTG CTC AGT CTG GTC CTT 45

← -1 +1

A L L F P S M A S M A M H V A
 GCA CTC CTG TTT CCA AGC ATG GCG AGC ATG GCA ATG CAC GTG GCC 90

Q P A V V L A S S R G I A S F
 CAG CCT GCT GTG GTA CTG GCC AGC AGC CGA GGC ATC GCC AGC TTT 135

V C E Y A S P G K A T E V R V
 GTG TGT GAG TAT GCA TCT CCA GGC AAA GCC ACT GAG GTC CGG GTG 180

T V L R Q A D S Q V T E V C A
 ACA GTG CTT CGG CAG GCT GAC AGC CAG GTG ACT GAA GTC TGT GCG 225

A T Y M M G N E L T F L D D S
 GCA ACC TAC ATG ATG GGG AAT GAG TTG ACC TTC CTA GAT GAT TCC 270

I C T G T S S G N Q V N L T I
 ATC TGC ACG GGC ACC TCC AGT GGA AAT CAA GTG AAC CTC ACT ATC 315

Q G L R A M D T G L Y I C K V
 CAA GGA CTG AGG GCC ATG GAC ACG GGA CTC TAC ATC TGC AAG GTG 360

GLYCOSYLATION SITE

E L M Y P P Y Y L G I G N G
 GAG CTC ATG TAC CCA CCG CCA TAC TAC CTG GGC ATA GGC AAC GGA 405

T Q I Y V I D P E P C P D S D
 ACC CAG ATT TAT GTA ATT GAT CCA GAA CCG TGC CCA GAT TCT GAC 450

F L L W I L A A V S S G L F F
 TTC CTC CTC TGG ATC CTT GCA GCA GTT AGT TCG GGG TTG TTT TTT 495

Y S F L L T A V S L S K M L K
 TAT AGC TTT CTC CTC ACA GCT GTT TCT TTG AGC AAA ATG CTA AAG 540

K R S P L T T G V Y V K M P P
 AAA AGA AGC CCT CTT ACA ACA GGG GTC TAT GTG AAA ATG CCC CCA 585

T E P E C E K Q F Q P Y F I P
 ACA GAG CCA GAA TGT GAA AAG CAA TTT CAG CCT TAT TTT ATT CCC 630

I N
 ATC AAT

636

FIG. 19

ATGGGTGTACTGCTCACACAGAGGACCGCTGCTCAGTCTGGTCCTGCACTCCTGTTCCA M~~G~~V~~L~~L~~T~~Q~~R~~T~~L~~S~~L~~V~~L~~A~~L~~L~~F~~P~~	-19 -7
AGCATGGCGAGCATGGCAATGCACGTGGCCAGCCTGCTGTGGTACTGGCCAGCAGCCGA S~~M~~A~~S~~M~~A~~M~~H~~V~~A~~Q~~P~~A~~V~~V~~L~~A~~S~~S~~R~~ +1	+42 +14
GGCATCGCTAGCTTGTGTGAGTATGCATCTCCAGGCAAAGCCACTGAGGTCCGGGTG G~~I~~A~~S~~F~~V~~C~~E~~Y~~A~~S~~P~~G~~K~~A~~T~~E~~V~~R~~V~~	+102 +34
ACAGTCTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATG T~~V~~L~~R~~Q~~A~~D~~S~~Q~~V~~T~~E~~V~~C~~A~~A~~T~~Y~~M~~M~~	+162 +54
GGGAATGAGTTGACCTCCTAGATGATTCCATCTGCACGGCACCTCCAGTGGAAATCAA G~~N~~E~~L~~T~~F~~L~~D~~S~~I~~C~~T~~G~~T~~S~~S~~G~~N~~Q~~	+222 +74
GTGAACCTCACTATCCAAGGACTGAGGCCATGGACACGGACTCTACATCTGCAAGGTG V~~N~~L~~T~~I~~Q~~G~~L~~R~~A~~M~~D~~T~~G~~L~~Y~~I~~C~~K~~V~~	+282 +94
GAGCTCATGTACCCACCGCCATACTACCTGGGCATAGGCAACCGAACCCAGATTATGTA E~~L~~M~~Y~~P~~P~~Y~~L~~G~~I~~G~~N~~G~~T~~Q~~I~~Y~~V~~	+342 +114
ATTGATCCAGAACCGTCCCCAGCAGATTCTGATCAGGAGCCAAATCTCTGACAAACTCAC I~~D~~P~~E~~P~~C~~P~~D~~S~~D~~Q~~E~~P~~K~~S~~S~~D~~K~~T~~H~~	+402 +134
ACATCCCCACCGTCCCCAGCACCTGAACCTCTGGGTGGATCGTCAGTCTCCTCTTCCCC T~~S~~P~~P~~S~~P~~A~~P~~E~~L~~L~~G~~S~~S~~V~~F~~L~~F~~P~~	+462 +154
CCAAAACCCAAGGACACCCCTCATGATCTCCGGACCCCTGAGGTACATGCGTGGTGGT P~~K~~P~~K~~D~~T~~L~~M~~I~~S~~R~~T~~P~~E~~V~~T~~C~~V~~V~~V~~	+522 +174
GACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAGGTG D~~V~~S~~H~~E~~D~~P~~E~~V~~K~~F~~N~~W~~Y~~V~~D~~G~~V~~E~~V~~	+582 +194
CATAATGCCAAGACAAAGCCGGGGAGGAGCAGTACAACAGCACGTACCGGGTGGTCAGC H~~N~~A~~K~~T~~K~~P~~R~~E~~Q~~Y~~N~~S~~T~~Y~~R~~V~~V~~S~~	+642 +214
GTCCTCACCGTCCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGAAGGTCTCC V~~L~~T~~V~~L~~H~~Q~~D~~W~~L~~N~~G~~K~~E~~Y~~K~~C~~K~~V~~S~~	+702 +234
AACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAGCCCCGA N~~K~~A~~L~~P~~A~~P~~I~~E~~K~~T~~I~~S~~K~~A~~K~~G~~Q~~P~~R~~	+762 +254
GAACCACAGGTGTACACCCCTGCCCATCCGGGATGAGCTGACCAAGAACAGGTACGC E~~P~~Q~~V~~Y~~T~~L~~P~~S~~R~~D~~E~~L~~T~~K~~N~~Q~~V~~S~~	+822 +274
CTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATGCCGTGGAGTGGGAGAGCAAT L~~T~~C~~L~~V~~K~~G~~F~~Y~~P~~S~~D~~I~~A~~V~~E~~W~~E~~S~~N~~	+882 +294
GGGCAGCCGGAGAACAACTACAAGACCACGCCCTCCCGTGCTGGACTCCGACGGCTCTTC G~~Q~~P~~E~~N~~N~~Y~~K~~T~~P~~P~~V~~L~~D~~S~~D~~G~~S~~F~~	+942 +314
TTCCCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGGACGTCTTCTCA F~~L~~Y~~S~~K~~L~~V~~D~~K~~S~~R~~W~~Q~~Q~~G~~N~~V~~F~~S~~	+1002 +334
TGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCGTCT C~~S~~V~~M~~H~~E~~A~~L~~H~~N~~H~~Y~~T~~Q~~K~~S~~L~~S~~S~~	+1062 +354

CCGGGTAAATGA
P~~G~~K~~*

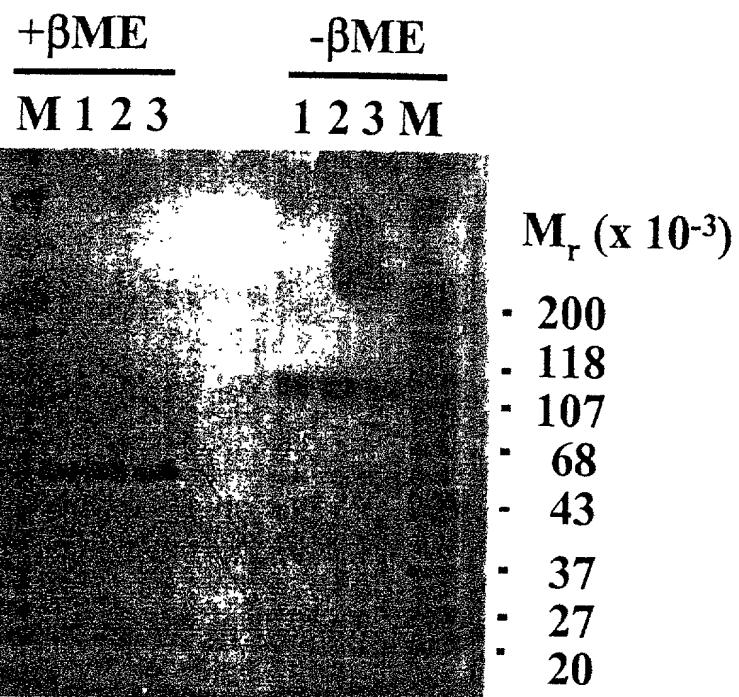


FIG. 2l A

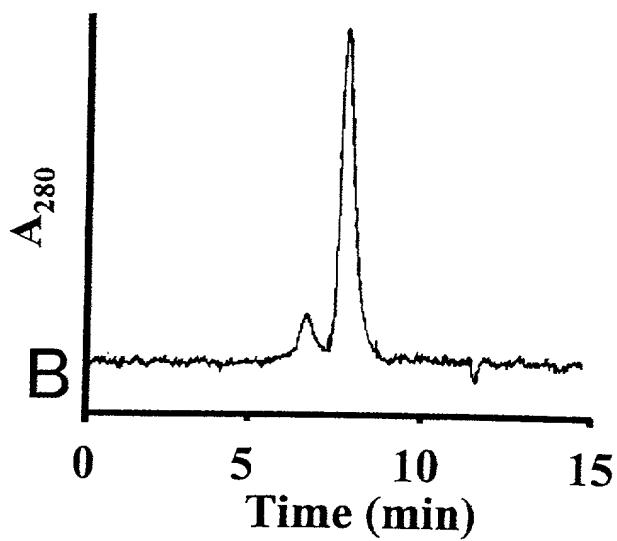


FIG. 2l B

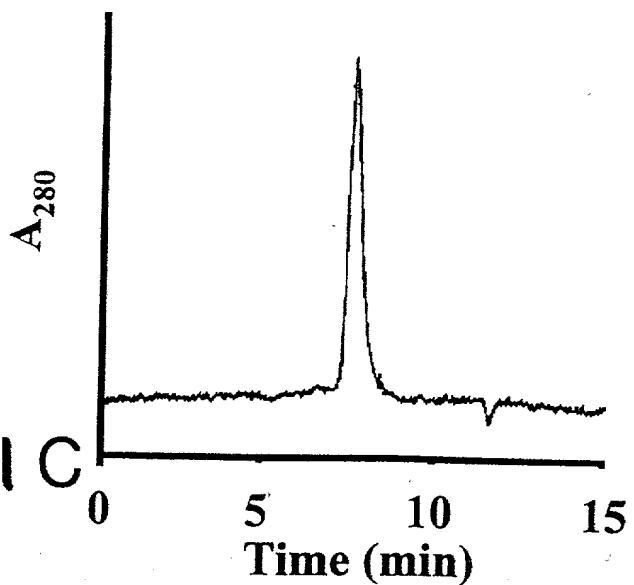
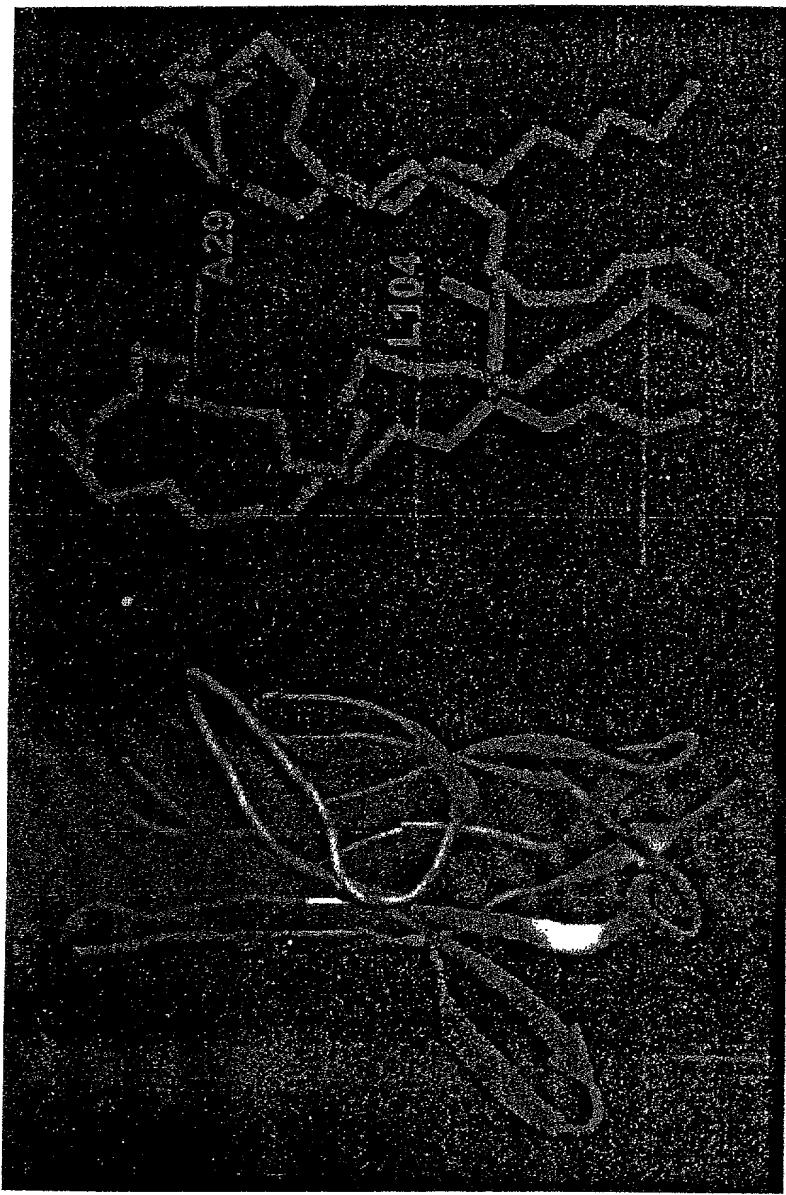


FIG. 2l C

FIG. 22



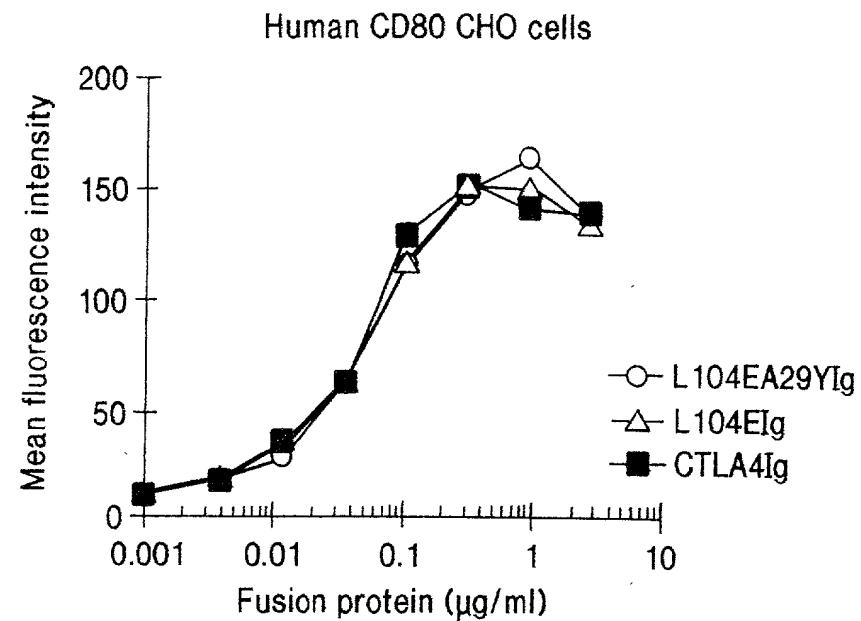


FIG. 23 A

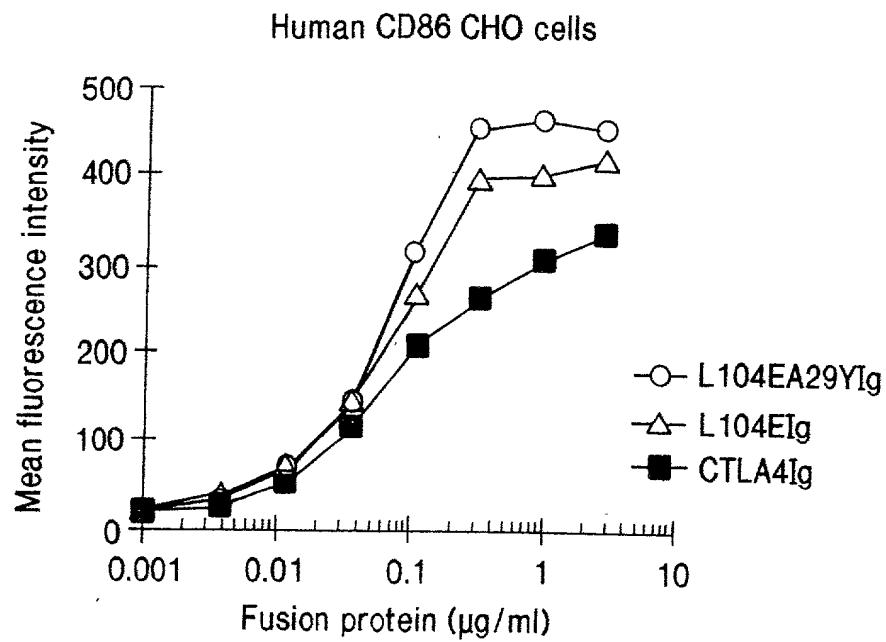


FIG. 23 B

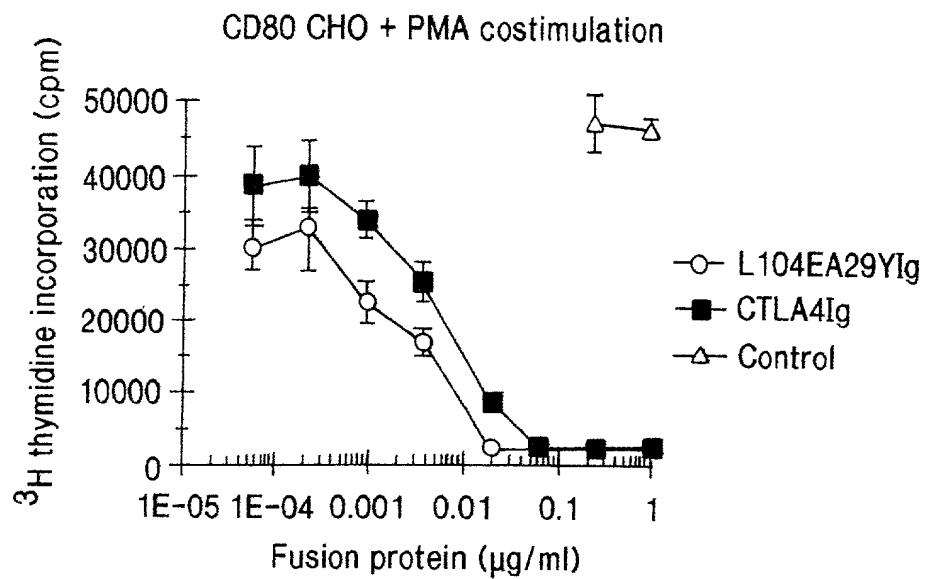


FIG. 24 A

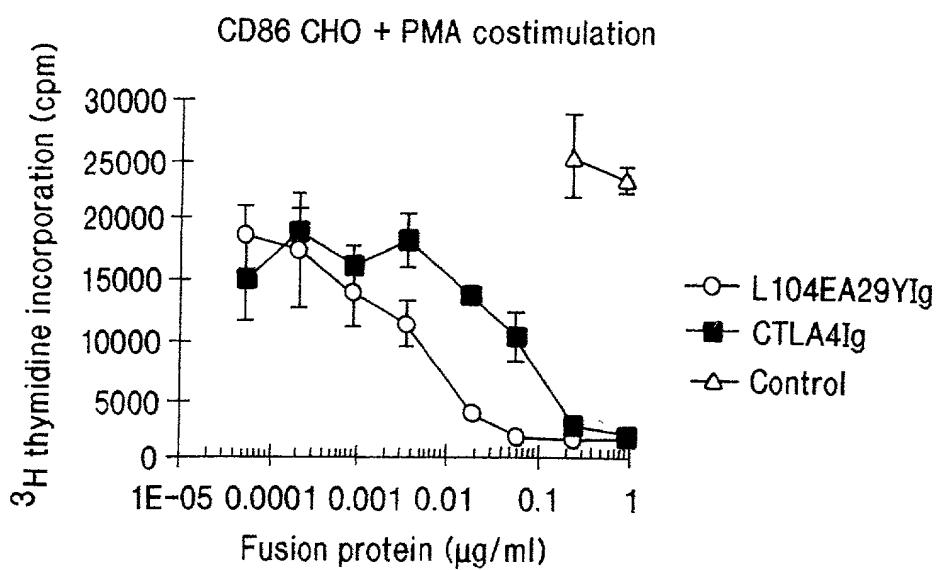


FIG. 24 B

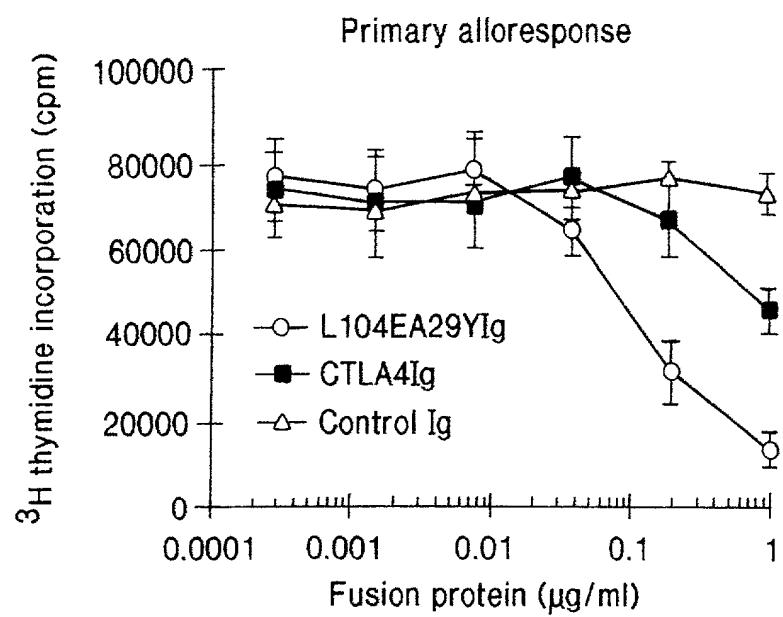


FIG. 2S A

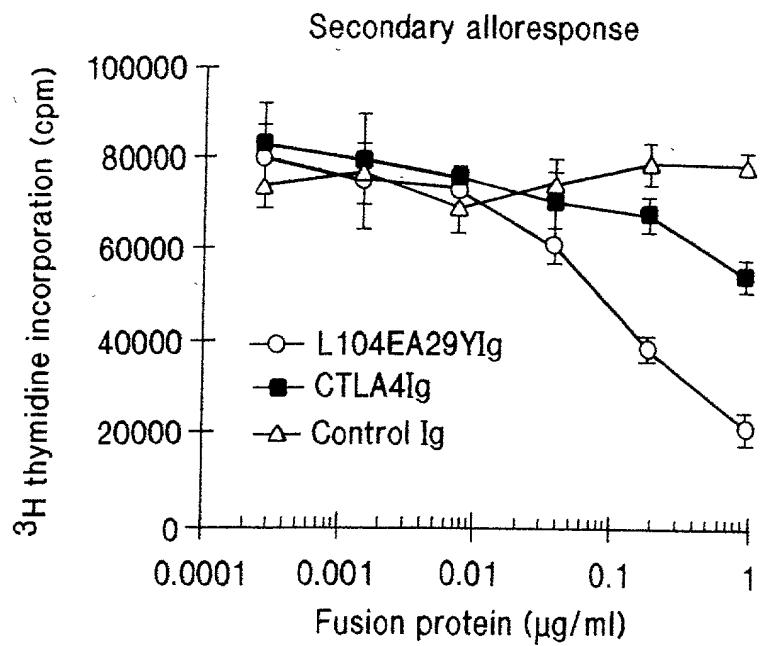


FIG. 2S B

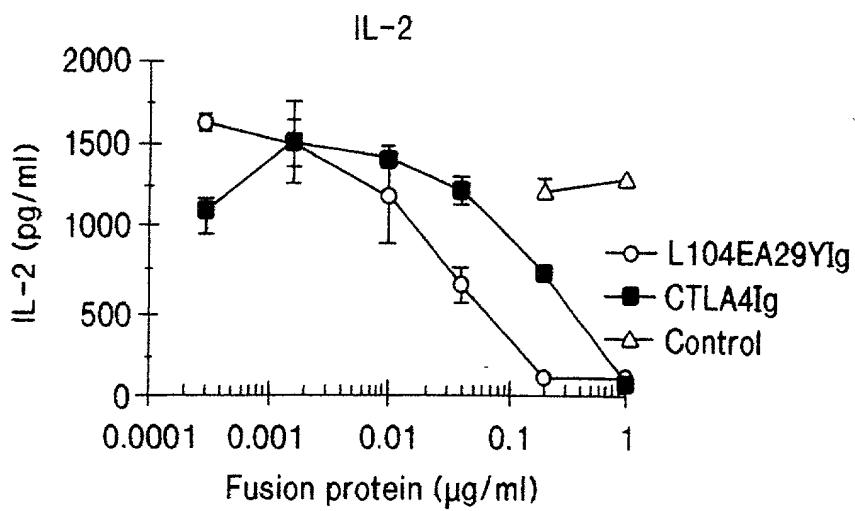


FIG. 26 A

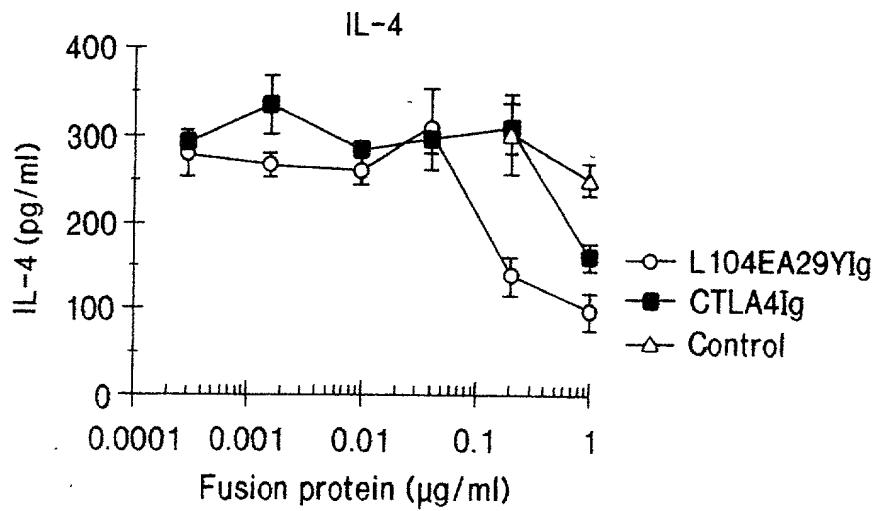


FIG. 26 B

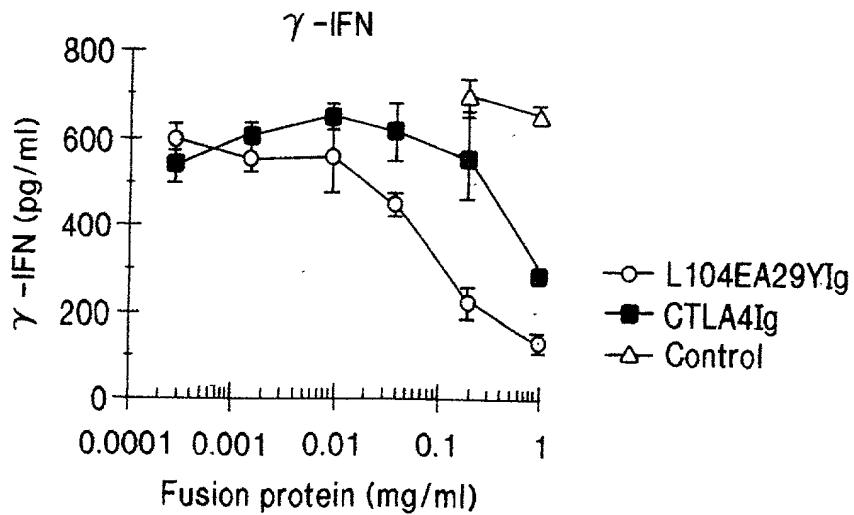


FIG. 26 C

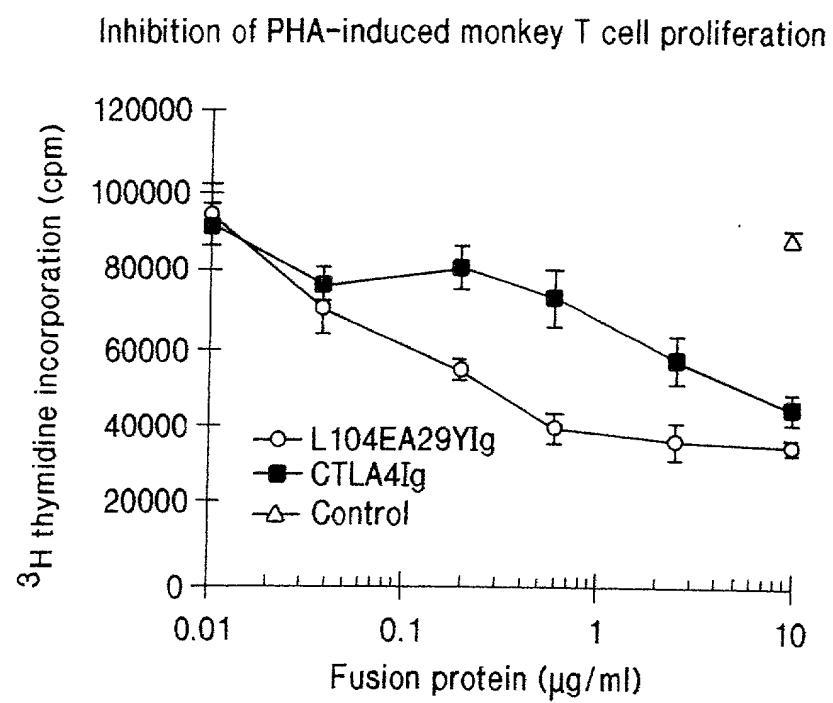


FIG. 27

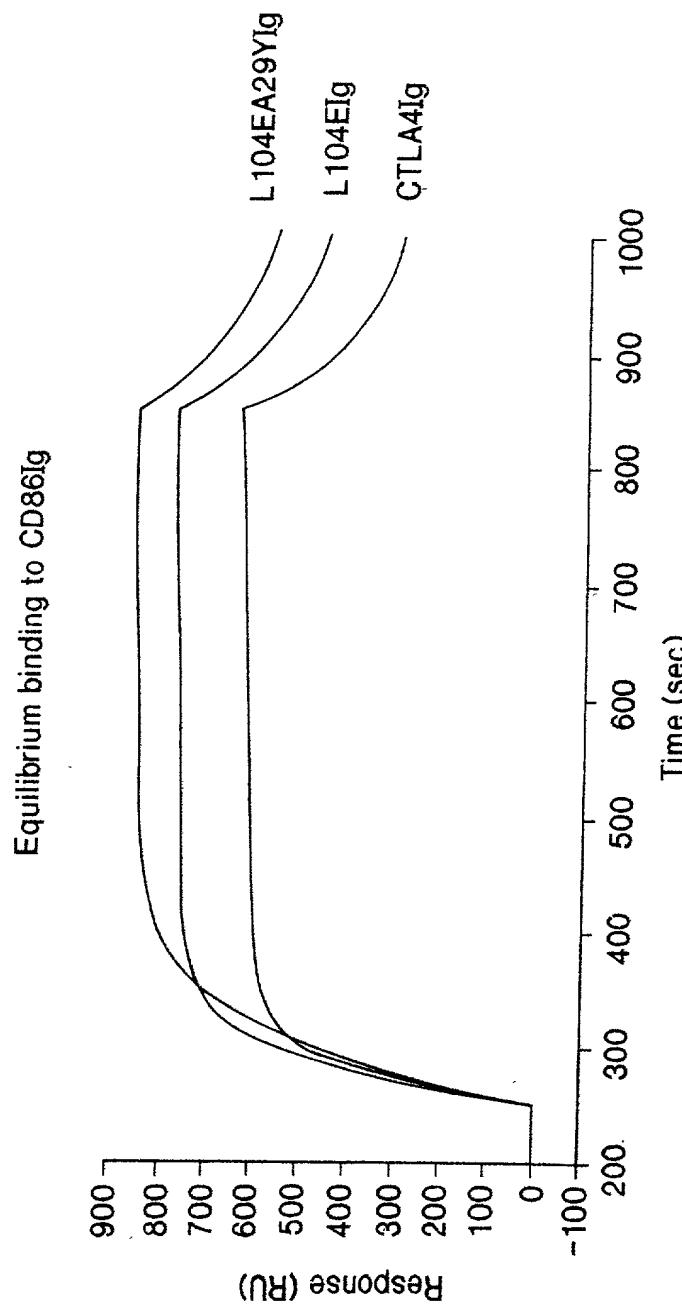


FIG. 28

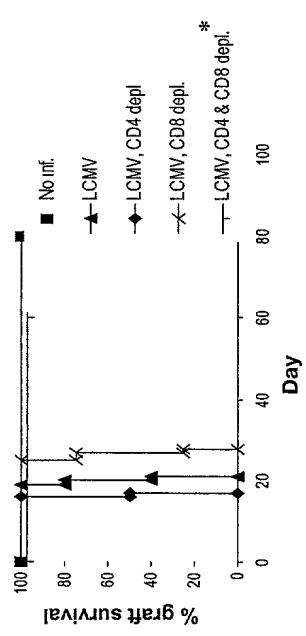


Figure 29

Figure 30

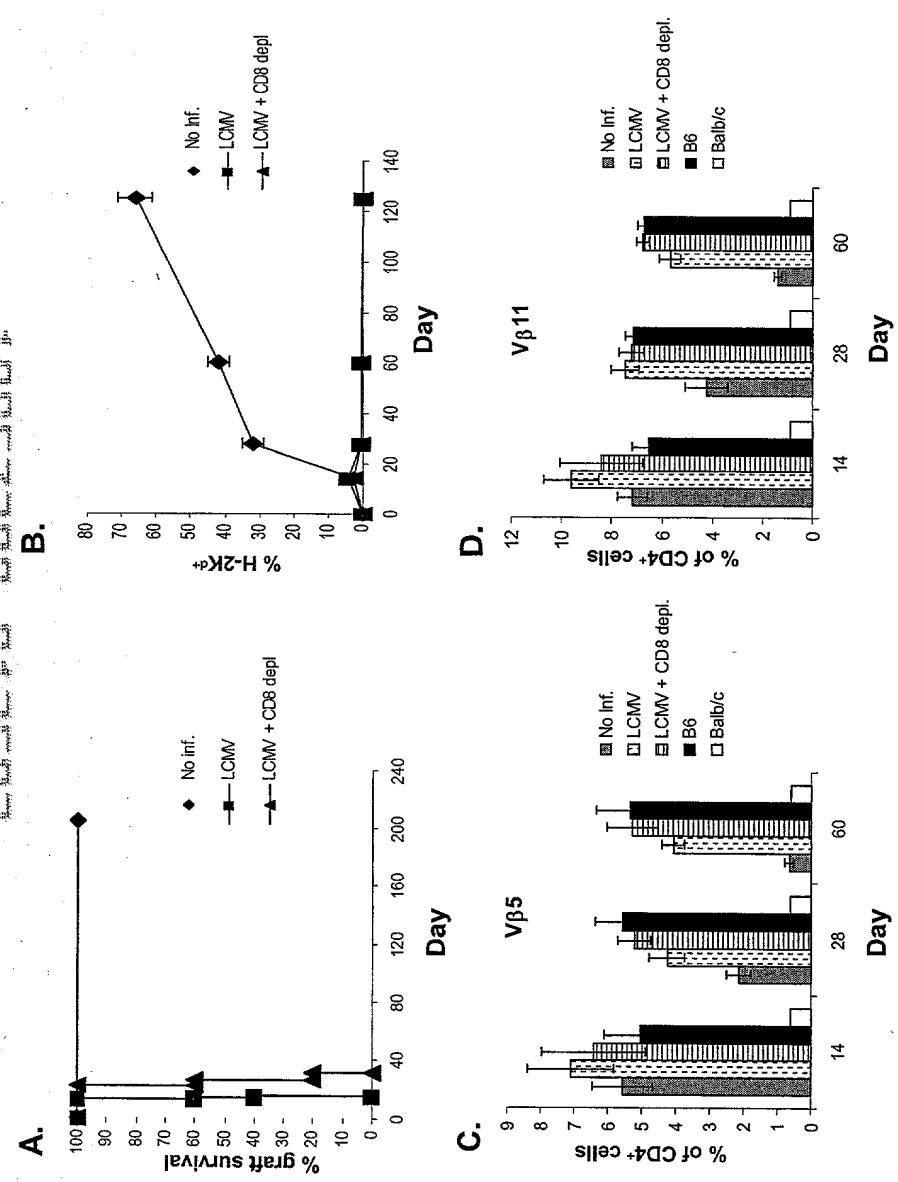


Figure 30

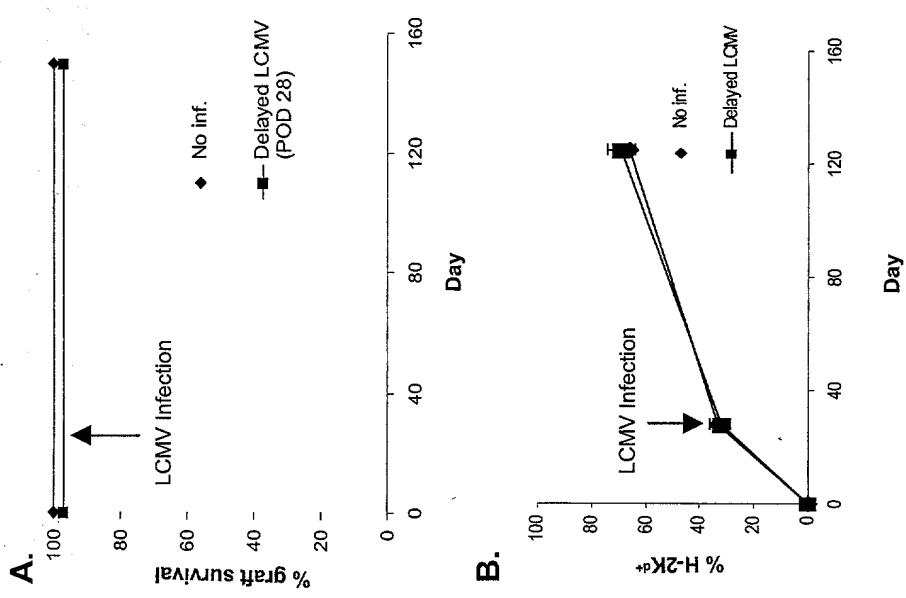


Figure 31

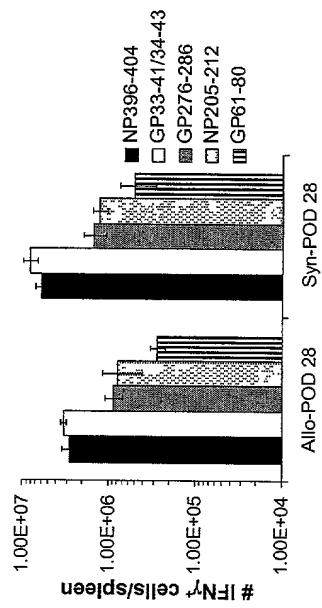


Figure 32

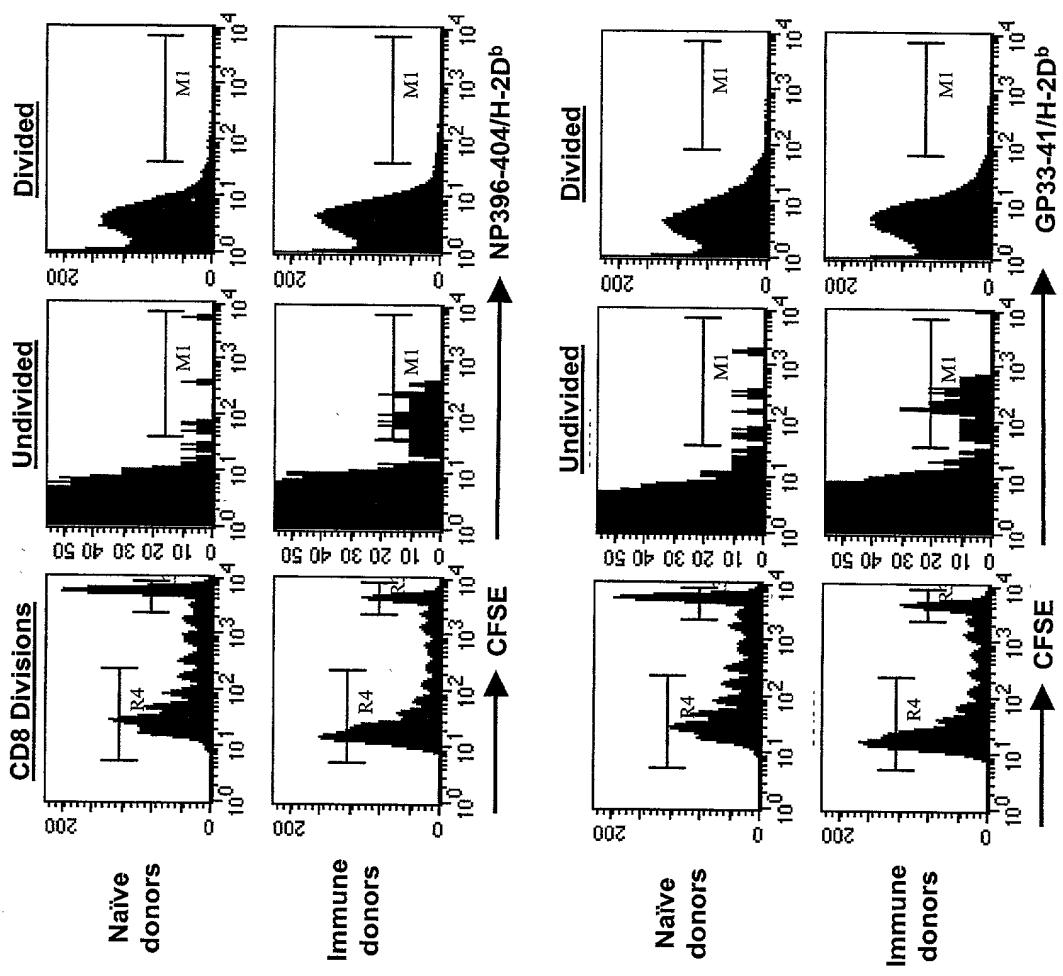


Figure 33

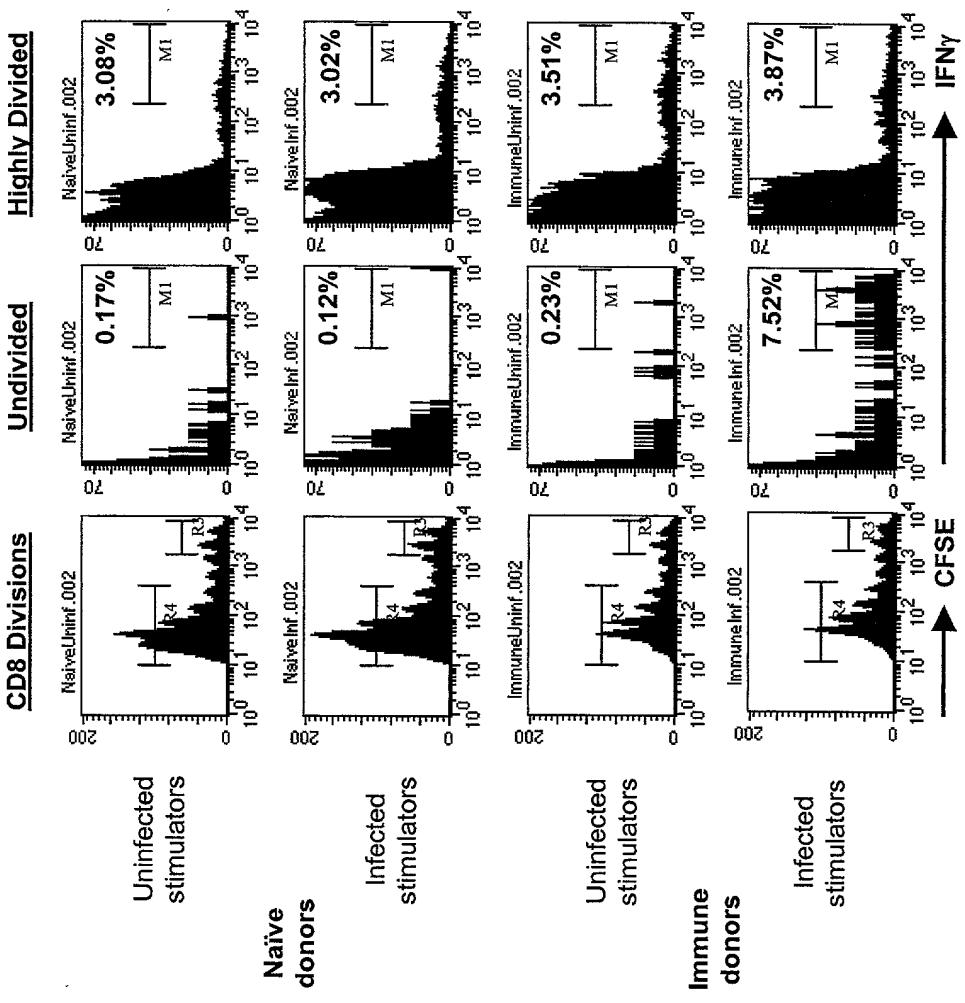


Figure 34

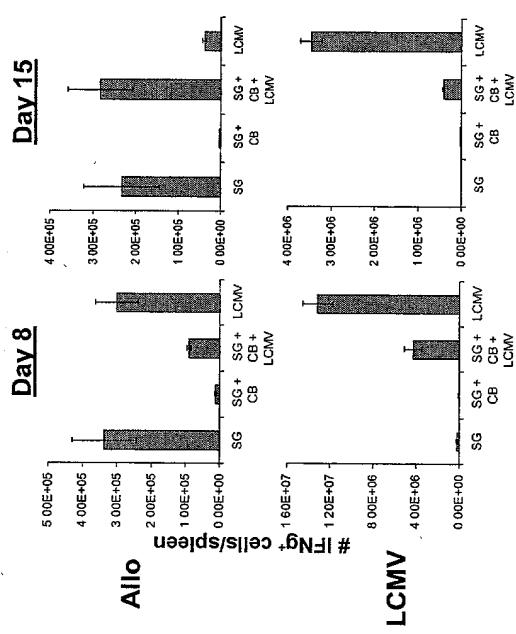


Figure 35

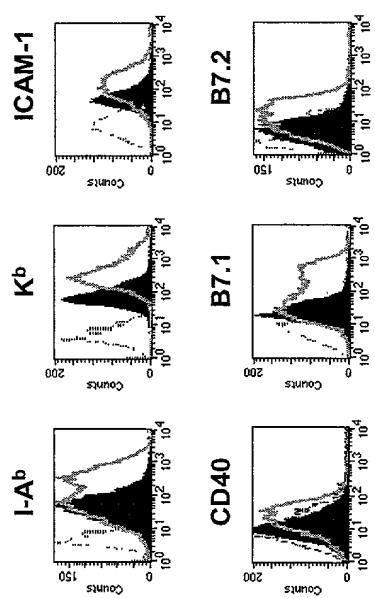


Figure 36